

THE PHILIPPINE SUBGENUS *HOPLOPROSOPIS* OF *HYLAEUS* (Hymenoptera: Colletidae)

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ABSTRACT: The subgenus *Hoploprosopis* of the Philippine Islands is redescribed and compared with the superficially similar subgenus *Metylaeus* of the Ethiopian Region. The diagnostic characteristics of *Hoploprosopis* are the antennal scape shorter than interantennal distance; preoccipital carina present; scutellum and metanotum conspicuously spinose; cephalic and mesosomal punctuation very coarse.

Hoploprosopis was described by Hedicke (1926) as a subgenus of *Prosopis*, to accommodate a new species described from Lamao, Luzon, Philippine Islands. Hedicke stressed the unusual presence of spines on the scutellum and metanotum and the very coarse punctuation as important diagnostic features. These are the same characters emphasized by Bridwell (1919) for his genus *Metylaeus* of the Ethiopian Region. Since Hedicke made no mention of Bridwell's genus, it may be assumed he was unaware of its existence. Popov (1939), apparently working from descriptions alone, suggested that *Hoploprosopis* may prove to be a synonym of *Metylaeus*.

At the present time I, together with G. I. Stage, am studying the hylaeine bees of the Ethiopian Region, and it is pertinent to reconsider the status of *Hoploprosopis*. Two males in the collections of the Los Angeles County Museum of Natural History (LACM) belong to the subgeneritype of *Hoploprosopis*. Paratypes of *Metylaeus cribratus* Bridwell, the type species of *Metylaeus*, were studied at the United States National Museum.

Subgenus **Hoploprosopis** Hedicke

Type species: *Prosopis* (*Hoploprosopis*) *quadricornis* Hedicke, 1926. Monobasic and original designation.

Diagnosis: Antennal scape shorter than interantennal distance; preoccipital carina present; scutellum and metanotum with conspicuous caudally directed, dorso-ventrally compressed, apically broadened, spines; cephalic and mesosomal punctuation very coarse.

Male: Mandibles slender, bidentate apically, outer tooth longest; mandibular bases almost contiguous with lower eye margins; clypeus longer than broad; clypeo-ocular distance slightly greater than clypeal width at base; clypeo-antennal distance less than clypeal width at base, slightly more than maximum diameter of antennal sockets; antenn-ocular distance equal to about three-fifths the maximum diameter of antennal socket; interantennal distance about two times an antennal socket diameter; supraclypeal area elevated between antennal sockets, with carinate margin, the carinae curving toward, and

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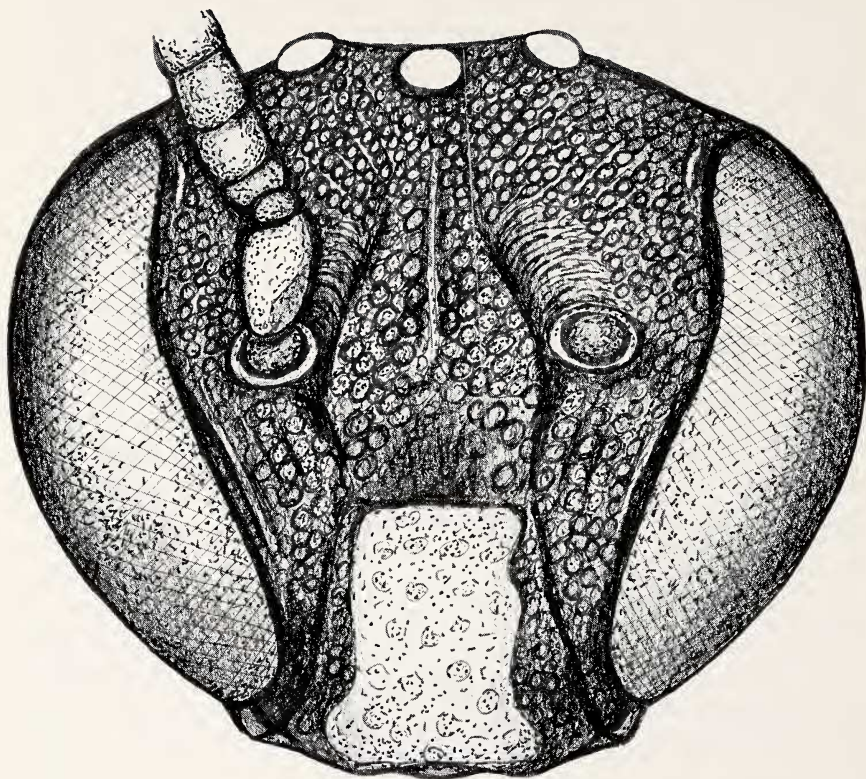


Figure 1. *Hylaenus (Hoploprosopis) quadricornis*, male. Frontal view of head. Figure by Ruth Ann DeNicola.

joining, antennal sockets on their lower margin; scape very short, its maximum length (exclusive of basal condyle) less than interantennal distance, distinctly shorter than following three segments combined; first flagellar segment distinctly broader than long; flagellum stout, median segments about as broad as long; genal areas narrow, about half as wide as eyes in lateral view; vertex compressed, interocellar distance much greater than distance between ocelli and posterior margin of vertex; preoccipital carina present. Carina on pronotal collar complete, crossing pronotal lobes anteriorly; a subcarinate ridge from pronotal humeri to neck; anterior, impunctate face of mesepisternum separated from punctate lateral face by a distinct carina, especially well-defined below; scutellum (Fig. 2) with defined horizontal and posterior faces, meeting at about a right angle, with a flattened, caudally directed, slightly curved, apically broadened spine on each side; axillae laterally marginate, slightly, arcuately produced; metanotum well below level of horizontal face of scutellum, with a spine, similar to that of scutellum, on either side of mid-line; propodeum

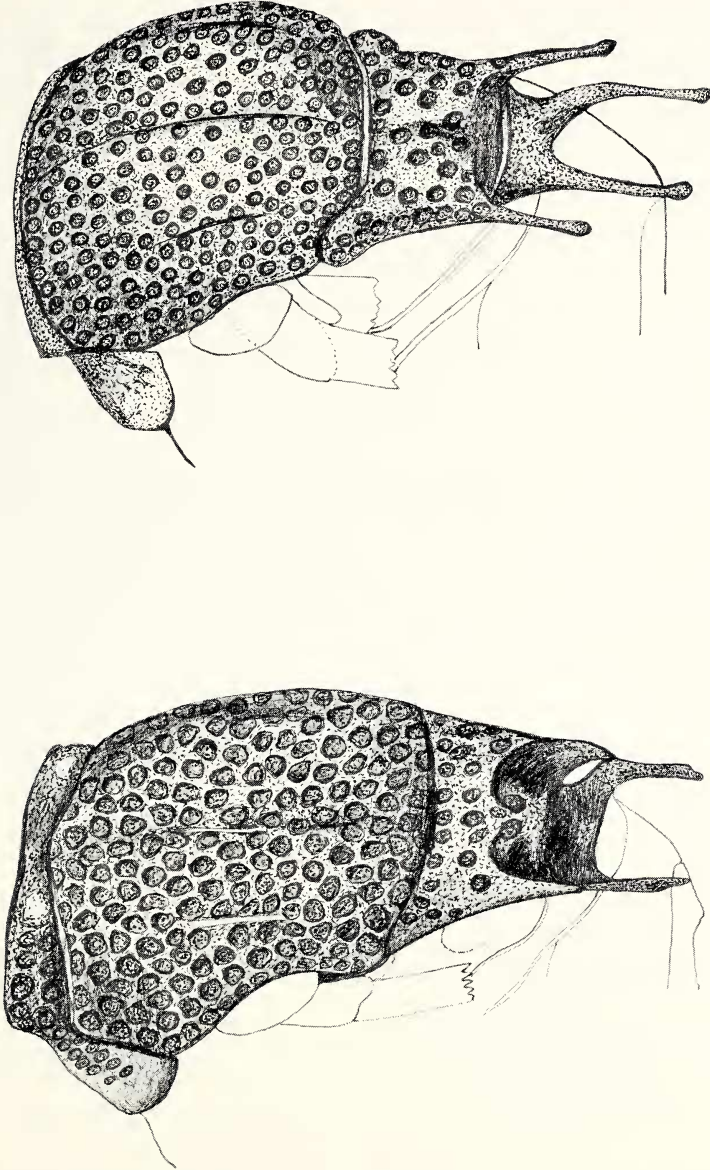


Figure 2. Thoracic dorsa of *H. (Hoploprosopsis) quadricornis* (above) and *H. (Metylaeus) cribratus* (below). Figures by Ruth Ann DeNicola.

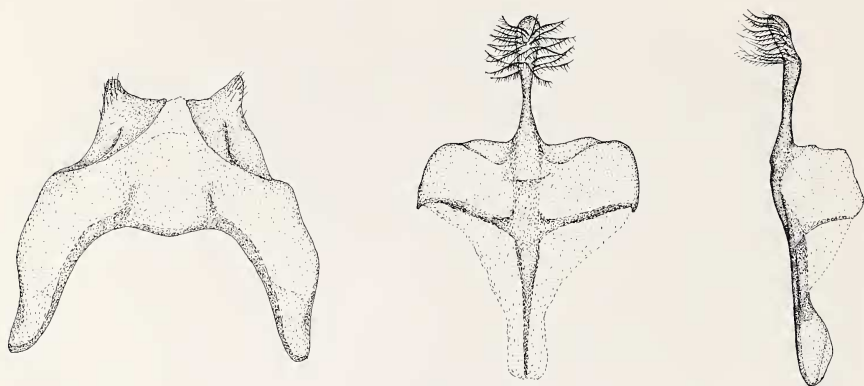


Figure 3. *H. (Hoploprosopis) quadricornis*. Left, eighth ventrite; middle, ninth ventrite, ventral view; right, ninth ventrite, lateral view. Figures by Ruth Ann DeNicola.

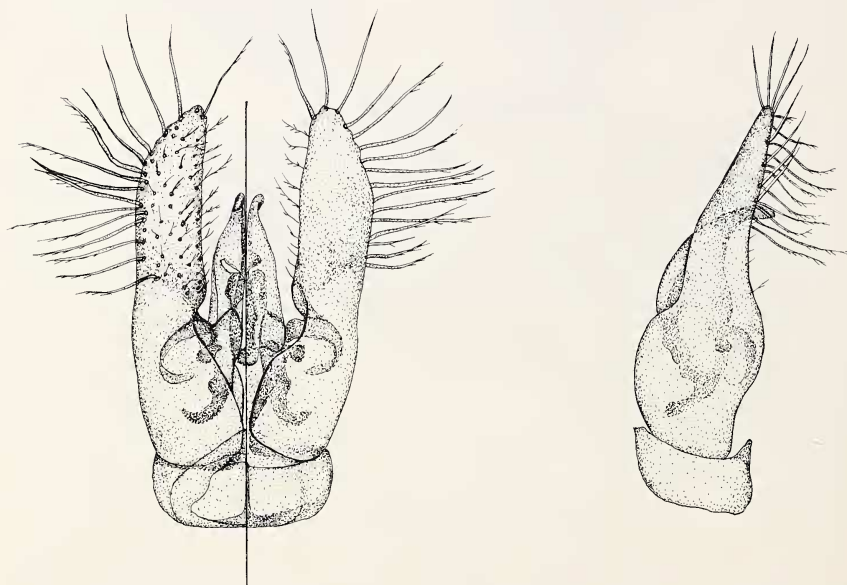


Figure 4. *H. (Hoploprosopis) quadricornis*. Genital capsule, from left to right, ventral, dorsal and lateral views. Figures by Ruth Ann DeNicola.

coarsely areolate above, lateral, oblique and transverse carinae present but obscured by areolae; propodeal disc reticulate; lateral fovea of second tergite punctiform; seventh sternite narrowly rounded apically, disc flat, without depressed margin. Marginal cell of forewing about twice as long as distance from its apex to apical wing margin, apical, free portion about twice as long as basal portion; second submarginal cell higher than long, about one-third as long as first. Terminalia: Figs. 3-5. Head and thorax very coarsely punctured; metasomal punctures much finer.

Female: Unknown.

Hoploprosopsis has an undeniable superficial resemblance to the African subgenus *Metylaeus*, but the very different terminalia will immediately distinguish between them. Useful external features are the scape length (exceeding interantennal distance and length of the following three segments combined in *Metylaeus*), the caudally directed, flangelike occipital carina of *Metylaeus* (simple in *Hoploprosopsis*), the different thoracic spination (spines laterally placed on both segments and laterally compressed in *Metylaeus*, while they are dorsoventrally compressed in *Hoploprosopsis*), the differing metasomal punctation (nearly as coarse as the thoracic punctation in *Metylaeus*), and the difference in the shape of the second submarginal cell (quadrate in *Metylaeus*). By analogy with other groups of *Hylaeus*, it is predicted that most of the above enumerated features will apply to females as well.

I have compared *Hoploprosopsis* with examples of most of the subgenera of the Australian area, as these are defined by Michener (1965). There is nothing in any of its characters to indicate an affinity with this fauna. The hylaeines of southeastern Asia are so poorly known that comparison with them seems impossible at the present time.

Specimens Examined: 2 ♂♂, Biliran Island, Philippine Islands, no further data (LACM).

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